

INL Advanced Test Reactor completes major maintenance outage

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Popular Mechanics Article, [The Next Atomic Age](#), October 2006 (817kB PDF)

"The ATR has a very mature maintenance program that consists of regular preventive and predictive maintenance and inspections," said David Richardson, Associate Laboratory Director for Nuclear Operations. "Some of these are conducted during the brief outages when we retrieve or insert experiments. Other work is done during extended, scheduled outages planned to do more extensive maintenance that couldn't be accomplished during the shorter outages. These activities are important to making sure that ATR continues to operate safely and reliably for several more decades to come, just as it has in the past."

Maintenance activities completed during the outage included more than 350 replacements and refurbishments in support of the reactor's Life Extension Program, as well as more than 200 technical safety inspections and surveillance tasks. These activities included replacing one set of test loop primary coolant pumps, refurbishing a second set of test loop primary coolant pumps, refurbishing electrical switchboards and associated electrical breakers, performing maintenance on diesel generator turbochargers, refurbishing the overhead water tank, and completing numerous other normal repairs in support of the ATR Life Extension Program.

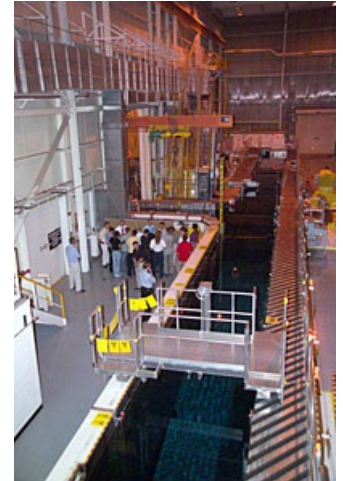


An Advanced Test Reactor operator monitors controls inside the ATR control room. During each outage, controls, systems and infrastructure are the main focus of updates and improvements.

As part of the effort, detailed inspections were also completed on a primary heat exchanger. These inspections concluded that the heat exchanger is in very good material condition and that continued operation without replacement or major maintenance at least until 2040 is reasonable.

Additionally, walk-down inspections of seven safety systems and complete nondestructive inspections of 47 primary coolant systems welds and installations were conducted. All these inspections validated that these systems have been well maintained and are in a condition to support reactor operation well into the future.

This inspection follows on the heels of a longer outage for a core internal changeout, which was completed in early 2005. That effort required all key reactor internal components to be replaced - a task performed every eight to 10 years to ensure reactor longevity.



A tour group visits the Advanced Test Reactor. Pools at ATR hold water to temporarily cool and contain fuel used in the reactor.



The Advanced Test Reactor is one of the world's premier materials test reactors providing crucial materials testing for the U.S. Navy and for industry customers for both medical and nuclear power-related isotopes.

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